#4

Form PTO-1449 (REV. 2-32) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** (Use several sheets if necessary)	ATTY. DOCKET NO.: 9611-26	SERIAL NO.: 09/957,456
	APPLICANTS: Tully Michael Underhill and Andrea Dawn Weston	
	FILING DATE: September 21, 2001	GROUP: 1636

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE	
		6,143,878	Nov. 7/00	Koopman et al.				

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	1.	Ahrens, P. B., M. Solursh, and R. S. Reiter 1977. Stage related capacity for limb chondrogenesis in cell culture Dev. Biol. 60:69-82.
	2.	Bader, D., T. Masaki, and D. A. Fischman 1982. Immunochemical analysis of myosin heavy chain during avian myogenesis in vivo and in vitro J Cell Biol. 95:763-70.
	3.	Bi, W., J. M. Deng, Z. Zhang, R. R. Behringer, and B. de Crombrugghe 1999. Sox9 is required for cartilage formation Nature Genetics. 22:85-9.
	4.	Cash, D. E., C. Bock, K. Schughart, E. Linney, and T. M. Underhill 1997. Retinoic acid receptor a function in vertebrate limb skeletogenesis: a modulator of chondrogenesis J. Cell Biol. 136:445-457.
	5.	Chen, P., J. L. Carrington, R. G. Hammonds, and A. H. Reddi 1991. Stimulation of chondrogenesis in limb bud mesoderm cells by recombinant human bone morphogenetic protein 2B (BMP-2B) and modulation by transforming growth factor β1 and β2 Exp. Cell Res. 195:509-515.
	6.	Denker, A. E., A. R. Haas, S. B. Nicoll, and R. S. Tuan 1999. Chondrogenic differentiation of murine C3H10T1/2 multipotential mesenchymal cells: I. Stimulation by bone morphogenetic protein-2 in high-density micromass cultures Differentiation. 64:67-76.

	7.	Duprez, D., E. J. de H. Bell, M. K. Richardson, C. W. Archer, L. Wolpert, P. M. Brickell, and P. H. Francis-West 1996. Overexpression of BMP-2 and BMP-4 alters the size and shape of developing skeletal elements in the chick limb Mech Dev. 57:145-157.
	8.	Duprez, D. M., M. Coltey, H. Amthor, P. M. Brickell, and C. Tickle 1996. Bone Morphogenetic Protein-2 (BMP-2) inhibits muscle development and promotes cartilage formation in chick limb bud cultures Dev Biol. 174:448-452.
	9.	Enomoto-Iwamoto, M., T. Nakamura, T. Aikawa, Y. Higuchi, T. Yuasa, A. Yamaguchi, T. Nohno, S. Noji, T. Matsuya, K. Kurisu, E. Koyama, M. Pacifici, and M. Iwamoto 2000. Hedgehog proteins stimulate chondrogenic cell differentiation and cartilage formation J Bone Miner Res. 15:1659-68.
	10.	Goff, D. J., and C. J. Tabin 1997. Analysis of Hoxd-13 and Hoxd-11 misexpression in chick limb buds reveals that Hox genes affect both bone condensation and growth. Development. 124:627-636.
	11.	Hall, B. K., and T. Miyake 1995. Divide, accumulate, differentiate: cell condensation in skeletal development revisited Int. J. Dev. Biol. 39:881-893.
	12.	Johnson, R. L., and C. J. Tabin 1997. Molecular models for vertebrate limb development Cell. 90:979-990.
	13.	Lefebvre, V., W. Huang, V. R. Harley, P. N. Goodfellow, and B. de Crombrugghe 1997. SOX9 is a potent activator of the chondrocyte-specific enhancer of the pro alpha1(II) collagen gene Mol. Cell. Biol. 17:2336-2346.
	14.	Lefebvre, V., G. Zhou, K. Mukhopadhyay, C. N. Smith, Z. Zhang, H. Eberspaecher, X. Zhou, S. Sinha, S. N. Maity, and B. de Crombrugghe 1996. An 18-base-pair sequence in the mouse Pro-alpha-1(II) collagen gene is sufficient for expression in cartilage and binds nuclear proteins that are selectively expressed in chondrocytes Molecular and Cellular Biology. 16:4512-4523.
	15.	Murakami, S., M. Kan, W. L. McKeehan, and B. de Crombrugghe 2000. Up-regulation of the chondrogenic Sox9 gene by fibroblast growth factors is mediated by the mitogen-activated protein kinase pathway Proc Natl Acad Sci U S A. 97:1113-8.
	16.	Ridgeway, A. G., S. Wilton, and I. S. Skerjanc 2000. Myocyte enhancer factor 2C and myogenin up-regulate each other's expression and induce the development of skeletal muscle in P19 cells J Biol Chem. 275:41-6.
	17.	Rosen, V., R. S. Thies, and K. Lyons 1996. Signaling pathways in skeletal formation: A role for BMP receptors Ann NY Acad Sci. 785:59-69.
	18.	Rudnicki, J. A., and A. M. Brown 1997. Inhibition of chondrogenesis by Wnt gene expression in vivo and in vitro Dev Biol. 185:104-18.
	19.	Weston, A., V. Rosen, R. A. S. Chandraratna, and T. M. Underhill 2000. Regulation of skeletal progenitor differentiation by the BMP and retinoid signaling pathways. J. Cell Biol. 148:679-690.
	20.	Wright, E., M. R. Hargrave, J. Christiansen, L. Cooper, J. Kun, T. Evans, U. Gangadharan, A. Greenfield, and P. Koopman 1995. The *Sry*-related gene *Sox9* is expressed during chondrogenesis in mouse embryos Nature Genet. 9:15-20.
	21.	Yokouchi, Y., S. Nakazato, M. Yamamoto, Y. Goto, T. Kameda, H. Iba, and A. Kuroiwa 1995. Misexpression of *Hoxa-13* induces cartilage homeotic transformation and changes cell adhesiveness in chick limb buds Genes & Dev. 9:2509-2522.
	22.	Zhou, G., S. Garofalo, K. Mukhopadhyay, V. Lefebvre, C. N. Smith, H. Eberspaecher, and B. de Crombrugghe 1995. A 182 bp fragment of the mouse proα1(II) collagen gene is sufficient to direct chondrocyte expression in transgenic mice Journal of Cell Science. 108:3677-3684.
	23.	Zou, H., R. Wieser, J. Massague, and L. Niswander 1997. Distinct roles of type I bone morphogenetic protein receptors in the formation and differentiation of cartilage Genes & Dev. 11:2191-2203.
	24.	Murakami, S; Kan, M; McKeehan, W; and de Crombrugghe, B 2000. Upregulation of the master chondrogenic factor Sox9 by fibroblast growth factors is mediated by the mitogen-activated protein kinase pathway. 46th Annul Meeting Orth. Research Society March 12-15.

	25.	de Crombrugghe Benoit; Lefebvre, Veronique; Behringer, Richard R; Bi, Weimin; Murakami, Shunichi; Huang, WEndong 2000. Transcriptional mechanisms of chondrocyte differentiation matrix biology 19:389-394.
	26.	Murakami, Shunichi; Lefebvre Veronique; and de Crombrugghe, Benoit 2000. Potent inhibition of the master chondrogenic factor Sox9 gene by interleukin-1 and tumor necrosis factor Journal of Bio Chem 275:3687-3692.
	27.	Smits, Patrick et al 2001. The transcription factors l-sox5 and sox6 are essential for cartilage formation Dev. Cell 1:277-290.
	28.	Antoniv, Taras T. et al 2001. Characterization of an evolutionary conserved far-upstream enhancer in the human 2(1) collagen (COL1A2) gene Journ Bio Chem 276:21754-21764.
	29.	Zhou, Guang et al 1998. Three high mobility group-like sequences within a 48-base pair enhancer o the *col2a1* gene are required for cartilage-specific expression in vivo Journ Bio Chem 273:14989-14997.

* EXAMINER: Initial if citation considered, whether or not citation is in accordance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

William Smith 4-9-03